

EIB 11-19(A)

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT BOARD

IN THE MATTER OF THE PETITION FOR)
A HEARING ON TITLE V OPERATING)
PERMIT NO. P098-R2,)

WILLIAMS FOUR CORNERS LLC,)

Petitioner/Appellant,)

vs.)

NEW MEXICO ENVIRONMENT)
DEPARTMENT, AIR QUALITY BUREAU,)

Respondent/Appellee.)

APPEAL PETITION



Pursuant to Section 74-2-7.H NMSA, 20.1.2.202 NMAC, and 20.2.70.403 NMAC, Williams Four Corners, LLC ("Petitioner") petitions the Environmental Improvement Board ("EIB") to modify, clarify or reverse the challenged conditions of Title V Operating Permit No. P098-R2 ("Permit") issued to the Lybrook Gas Plant. The challenged conditions of the Permit are unlawful because they create new substantive conditions in the Permit, are not necessary to assure and verify compliance with the Permit, and are unconstitutionally vague.

I. IDENTITY OF PETITIONER

The Petitioner is:

Williams Four Corners LLC
One Williams Center
Tulsa, OK 74172

The attorneys representing Petitioner are:

Richard L. Griffith
Richard L. Griffith, LLC
1580 Lincoln St., Suite 1200
Denver, CO 80203
Phone: (303)534-4615
Cell Phone: (303)725-0446
ricklgrif@aol.com

Elizabeth A. Joyner
Senior Counsel
Williams
One Williams Center 47th Floor
Tulsa, OK 74172
Phone: (918)573-1143
Elizabeth.Joyner@Williams.com

II. CERTIFICATION OF STANDING

By its sworn signature below, Petitioner certifies that it has standing under the New Mexico Air Quality Control Act to file this Appeal Petition on the grounds that it is the owner of the Lybrook Gas Plant and Permittee, it participated in the permitting proceeding before the Respondent, and it is adversely affected by the permit action.

III. PERMITTING ACTION APPEALED

Petitioner is appealing the issuance of Title V Operating Permit No. P098-R2, dated December 21, 2011, by the Air Quality Bureau of the New Mexico Department of Environment. A copy of Permit No. P098-R2 is attached.

IV. INTRODUCTION

A. Description of Lybrook Gas Plant and Permit

The Lybrook Gas Plant is a natural gas cryogenic processing plant that is permitted to process up to 89 million standard cubic feet per day ("MMscfd"). The Plant removes natural gas liquids, such as propane, butane, and ethane, from the methane gas for sale as separate

products. The inlet natural gas is routed through an amine unit that removes carbon monoxide. The gas passes through turbo-expanders that liquefy natural gas liquids (“NGL”). The NGL/gas mixture then passes through four cryogenic distillation columns to selectively separate methane, ethane, propane, and butane. The NGLs are either transported off-site by truck or by pipeline. The residue methane gas is compressed by six turbine engines and transmitted offsite via a pipeline.

The Plant’s emission units regulated by the Permit include: eight turbine engines, two reciprocating internal combustion engines, a heater, a flare, a cooling tower, a propane loading rack, an amine unit, a gasoline storage tank, and fugitive emissions of volatile organic compounds. *See* Permit, Table 104. The Permit sets pound per hour (“pph”) and ton per year (“tpy”) emission limits for individual units for several pollutants, including nitrogen oxides (“NOx”), carbon monoxide (“CO”), volatile organic compounds (“VOCs”), total suspended particulates (“TSP”), and particulate matter (“PM10” - less than 10 microns in size). *See* Permit, Table 106.A.

The most recent NSR permit issued to the Plant is NSR Air Quality Permit No. 0081-M5 (January 13, 2009). Permit No. 0081-M5 covered the same emission units and, with a few exceptions, incorporated the same limits and standards as the Permit.

B. Background of Title V Operating Permit Program

The challenged Permit is a Title V Operating Permit. Under the authority of the Air Quality Control Act, NMSA 74-2-7, the EIB promulgated regulations (20.2.70 NMAC) to implement the Federal Clean Air Act’s Title V Operating Permit Program for major sources of air pollutants. The EIB’s regulations are essentially identical to the U.S. Environmental Protection Agency (“EPA”) Operating Permit Program regulations (40 CFR Part 70). The Air

Quality Bureau of the New Mexico Environment Department (“Bureau”) has been delegated the authority to issue Title V Operating Permits.

Before Title V of the 1990 Clean Air Act Amendments created the Title V Operating Permit Program, there was no single federal requirement for a permit that combined all air quality-related requirements applicable to a single source. Specific emission units at a source might be subject to different requirements of various preconstruction permits and state and federal regulations. The various sources of requirements applicable to a specific emission unit, and the variety of construction permits and regulations that could apply to a single source could make it confusing for sources and for regulatory agencies to identify compliance requirements. Title V Operating Permits were intended to resolve this confusion by capturing all of the requirements that apply to a particular facility in a single document.

The EIB’s regulations mirror the language of EPA’s regulations, 40 C.F.R. Part 70, and align with the direction that EPA provided for all Title V Operating Permit programs. EPA’s Operating Permit rules clearly state that air operating permits are not the vehicle for new substantive limits on permitted sources: “While Title V does not impose substantive new requirements. . . .” 40 C.F.R. 70.1(b); 57 Fed. Reg. at 32251. Consistent with EPA’s regulations, the EIB’s rules provide that Operating Permits must “include all applicable requirements for all relevant emissions units. . . .” 20.2.70.302 NMAC. “Applicable requirements” include existing facility-related requirements of the federal Clean Air Act and federal regulations, New Mexico statutes and regulations, and requirements contained in preconstruction permits issued to the facility. 20.2.70.7.E NMAC.

The Operating Permit may add monitoring requirements not specified in the “applicable requirements” only as “required to assure and verify compliance with the terms and conditions of the permit.” 20.2.70.302.C(1) NMAC. “Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping . . .), the permit shall require periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit. . .” 20.2.70.302.C(2) NMAC. New, unnecessary monitoring requirements are substantive requirements. *See Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1026-27 (D.C. Cir. 2000). (“[i]f a State agency . . . devised a permit condition increasing a company’s stack test obligation (as set forth in a State or federal standard) from once a year to once a month, no one could seriously maintain that this was something other than a substantive change. . . . We have recognized before that changing the method of measuring compliance with an emission limitation can affect the stringency of the limitation itself. [cite omitted].”).

Similarly, the permit may only add recordkeeping requirements “sufficient to assure and verify compliance with the terms and conditions of the permit. . . .” 20.2.70.302.D NMAC.

In sum, the EIB’s Operating Permit rules do not authorize the creation of new emission limits or standards that are not specified in an existing applicable requirement. They authorize new monitoring requirements only if an existing requirement does not specify monitoring sufficient to yield reliable data. New monitoring requirements that change the stringency of the limitation are prohibited as new substantive requirements.

The general grounds for this appeal are: (1) The challenged Permit conditions unlawfully impose new substantive requirements. (2) The challenged Permit conditions unlawfully impose

monitoring and recordkeeping requirements that are not necessary to assure and verify compliance and are unduly burdensome. (3) Certain conditions of the Permit are unlawfully vague and fail to meet Constitutional Due Process standards of fair notice.

V. PERMIT CONDITIONS APPEALED AND GENERAL STATEMENT OF OBJECTIONS

1. Condition A111B Hydrogen Sulfide and Mercaptan Emissions

a. Requirements Appealed

Petitioner appeals the reference in this Condition to “undiluted effluent gas stream or streams.”

b. General Statement of Objections

Petitioner objects on the grounds that this reference is unlawfully vague and fails to meet Constitutional Due Process standards of fair notice. Petitioner seeks clarification of this requirement.

2. Condition A113 Compliance Plan A. Inlet Gas Sulfur

a. Requirements Appealed

Petitioner appeals all requirements of this Condition.

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

- i. They are not applicable requirements but impose new substantive requirements. These requirements were not included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.
- ii. Condition A110 Facility Fuel Sulfur Requirement provides for compliance demonstration through fuel contract terms, a fuel gas analysis, or compliance with the Custom Fuel Monitoring Schedule in Appendix A of the Permit. Condition A110

assures compliance with applicable facility sulfur emission limits. Condition A113 is not necessary to assure and verify compliance and is unduly burdensome.

iii. The 1 ppmv or greater total sulfur threshold for calculating emission rates for Units 16, 23 and F-1 does not correspond to any emission limit or standard applicable to such Units. Combustion sources may combust natural gas containing no more than 0.25 grains of total sulfur per 100 dry standard cubic feet (Permit Condition 110.A).

iv. The Permit and applicable regulations require the Petitioner to Report deviations from Permit requirements every six months (20.2.70.302.E(2); Condition B110) and submit compliance certifications annually (20.2.70.302.E(3); Condition B112). Because the 1 ppmv value is not a Permit limit, the reporting of any measurement greater than 1 ppmv within 30 days as required by Condition A113.A Reporting is not necessary to assure and verify compliance and is unduly burdensome.

3. Condition A115 Facility Inlet

a. Requirements Appealed

Petitioner appeals the requirements of this Condition related to inlet gas sampling and analysis for BTEX, mercaptan, and hydrogen sulfides ("H₂S"), calculations of daily sulfur quantities, and related recordkeeping . The specific subparagraph numbers of this Condition appealed are: (2), Monitoring 2) and 3), Recordkeeping 1), 2) and 3).

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

i. They are not applicable requirements but impose new substantive requirements. These requirements were not included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.

ii. These requirements, including the requirement for a totalizing flow meter, are not necessary to assure and verify compliance and are unduly burdensome.

4. Condition A209 Leak Detection and Repair Program

a. Requirements Appealed

Petitioner objects to all requirements of this Condition.

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

i. These leak detection and repair (“LDAR”) requirements are not applicable requirements but impose new substantive requirements. EPA’s LDAR requirements, 40 C.F.R. Part 60, Subpart KKK, do not apply to the Lybrook Gas Plant. *See* AQB’s Statement of Basis – Narrative for the Permit, p. 2 (“Permit Statement of Basis”). These requirements are not based on applicable requirements and were not included in the most recent NSR construction permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.

ii. The stated purpose of this Condition is to “comply with the allowable [VOC] emission limits at Table 106A” of the Permit. The Permit’s VOC emission limit of 26.8 tons per year (“tpy”) is based on Petitioner’s calculations using EPA emission factors for leaks from gas plant components, such as valves, flanges and pump seals. The EPA emission factors are derived from data from large populations of equipment that include non-leaking and high leaking components. Because it is derived using the EPA emission factors, the Plant complies with the Permit’s 26.8 tpy even when a certain percentage of components are leaking VOC emissions. Therefore, the monitoring and repair requirements of Condition A203 are not necessary to assure and verify compliance with the VOC emission limit and are unduly burdensome.

iii. Compliance assurance requirements must correspond to the methodology for setting the related emission limits. These LDAR requirements are not correlated with compliance with the 26.8 tpy emission limit. This Condition creates a new substantive requirement and does not assure or verify that fugitive VOC emissions from the Plant meet the 26.8 tpy limit.

iv. The Permit states that this Condition is based on AQB's "Monitoring Guidance for Fugitive Leaks (VOC and/or HAPs)", dated 4/21/2003 ("Guidance"). The Guidance states that an LDAR program is required if a facility is "major" for the pollutant (i.e., VOCs) and fugitive emissions are greater than 25 tpy facility-wide. The Guidance has not been adopted as a state or federal regulation, as a term or condition of a preconstruction permit, or as a requirement of the State Implementation Plan, and, is, therefore, not an applicable requirement.

v. This Condition would require the annual inspection of numerous components - the vast majority of which have the potential to leak only *de minimis* concentrations of VOCs. The requirement to inspect all components is unreasonable and unduly burdensome.

vi. This Condition requires Petitioner to "conduct an annual chemical analysis of pipe contents." Petitioner objects on the grounds that this reference is unlawfully vague and fails to meet Constitutional Due Process standards of fair notice.

Petitioner seeks clarification of this requirement.

vii. The scope and applicability of this Condition is unlawfully vague and fails to meet Constitutional Due Process Standards of fair notice. Petitioner seeks clarification that this requirement applies only to components in VOC service.

5. Condition A203 Tank Throughput (Unit T-15)

a. Requirements Appealed

Petitioner appeals the Permit's incorporation of 40 CFR 63, Subparts A and CCCCCC to the extent they are interpreted to prohibit the continued use of Unit T-15 (300 gallon gasoline storage tank).

b. General Statement of Objections

Petitioner objects on the grounds that this Condition is unlawfully vague and fails to meet Constitutional Due Process standards of fair notice. Petitioner seeks a clarification that the requirement to handle gasoline to not allow vapor releases to the atmosphere for extended periods of time does not prohibit the continued use of Unit T-15 (300 gallon gasoline storage tank).

6. Condition A203C Truck Loading – Propane Loading Rack (Unit 22) and Condition A106 Allowable Pound Per Hour VOC Emissions for Unit 22

a. Requirements Appealed

Petitioner appeals Unit 22's 6.4 pound per hour allowable emissions of VOC in Table 106A and the requirements of Condition A203C related to monitoring volume of propane loaded for each truck, calculating hourly load out volume, and calculating pounds per hour of VOC emissions. The specific subparagraph numbers of this Condition appealed are: Monitoring 1); Recordkeeping 1) and 3).

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

i. These are not applicable requirements but impose new substantive requirements. Neither the pound per hour VOC emission limit nor the monitoring requirements were included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.

ii. The pound per hour emission limits, the truck load monitoring requirements, and the hourly VOC emission recordkeeping requirements are not necessary to assure and verify compliance with the 19.3 tpy VOC allowable emission limit and are unduly burdensome.

iii. Compliance assurance requirements must correspond to the methodology for setting emission limits. The 19.3 tpy VOC allowable emission limit is based on EPA A-42 hourly emission factors and a throughput of 30 million gallons year. Monitoring compliance based on individual truck load monitoring is not necessary to assure and verify compliance with, and is inconsistent with, an emission limit based on annual throughput estimates. This Condition creates a new substantive requirement.

7. Condition A204B Excess Air (Unit 15)

a. Requirements Appealed

Petitioner objects to this Condition in its entirety.

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

i. These are not applicable requirements but impose new substantive requirements. These requirements were not included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.

ii. The Permit Statement of Basis, p. 14, states that the monitoring of excess air is required to comply with the NO_x and CO allowable emission limits in the Permit, Table 106.A. However, there is no known quantitative correlation between excess air gas levels in the flue gas and NO_x and CO emissions from Unit 15. Therefore, this Condition does not assure and verify compliance with the NO_x and CO limits and is unduly burdensome.

8. Condition A206 Flare Emissions (Unit 16)

a. Requirements Appealed

Petitioner appeals the requirements related to use of a totalizing flow meter, calculations of hourly and SSM flow volumes, and distinguishing between steady-state and SSM events.

The specific subparagraphs of this Condition appealed are: the Monitoring requirement to use a totalizing flow meter; Recordkeeping Requirements: 1), 2), 3), 6), 7), and 8).

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

- i. These are not applicable requirements but impose new substantive requirements. Neither the Monitoring requirement nor the recordkeeping requirements were included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.
- ii. Compliance assurance and monitoring requirements must correspond to the methodology for setting emission limits. Unit 16's hourly emission limits are calculated from emission factors and a gas stream flow rate of 44.88 Mscf/hr., and the annual emission limit is calculated from and a gas stream flow rate of 76.46 MMscf/yr based on a 12 month rolling total. Emission calculations made by the Petitioner demonstrate that even during blowdown events, Unit 16 meets the hourly emission limits. Monitoring compliance and calculating emissions on an hourly basis are not necessary to assure and verify compliance with the Permit's emission limits which are based on maximum-flow-rates and emission factors.
- iii. It is not feasible to distinguish between steady-state and startup, shutdown, and maintenance ("SSM") events based on inlet gas monitoring. Therefore, it is unreasonable to impose recordkeeping requirements that depend on the technical capability of distinguishing between the two types of events.

9. Condition A208 Amine Unit (Unit 23)

a. Requirements Appealed

Petitioner appeals the requirements related to use of a totalizing flow meter, quarterly monitoring, annual inspection of flash tank closed-loop system, annual analysis of contactor inlet gas, and related recordkeeping requirements. The specific subparagraphs of this Condition appealed are: Requirement 4; Monitoring requirements 1), 2), 3), and 4); Recordkeeping requirements: 1), 2), 3), and 6).

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

i. These are not applicable requirements but impose new substantive requirements. Neither the closed loop routing requirement, the Monitoring requirements nor the Recordkeeping requirements were included in the most recent NSR permit issued to the Lybrook Gas Plant in 2009, NSR Air Quality Permit No. 0081-M5.

ii. NSR Air Quality Permit No. 0081-M5 requires measurement of the amine recirculation rate semiannually to assure and verify compliance with the Amine Unit's allowable emission limits. The requirements of this Condition, including continuous monitoring with a totalized flow meter, monitoring the lean amine recirculation rate on a quarterly basis, annually inspecting the flash tank closed-loop system, analyzing the contactor inlet gas, and performing the related recordkeeping requirements, are not necessary to assure and verify compliance and are unduly burdensome.

10. Condition A210 (Cooling Tower)

a. Requirements Appealed

Petitioner appeals all of the requirements of this Condition.

b. General Statement of Objections

Petitioner objects to these requirements on several grounds, including, but not limited to:

- i. PM emissions from this Unit are insignificant. There are no applicable requirements for emissions from this Unit.
- ii. The recirculation capacity limits, TDS content limits and the related monitoring and recordkeeping requirements are not necessary to assure and verify compliance and are unduly burdensome.

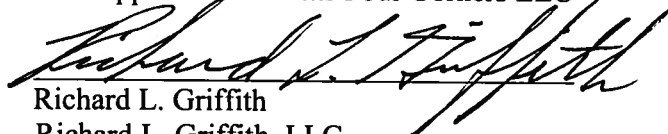
VI. WAIVER OF RIGHT TO HEARING WITHIN 60 DAYS

Pursuant to 20.1.2.202 NMAC, Petitioner hereby waives the right to a hearing within sixty days to allow time to negotiate with the AQB.

VII. CONCLUSION

WHEREFORE, Petitioner respectfully requests the EIB to set a hearing to hear evidence in support of this Appeal Petition and at the conclusion of the hearing to order the above-requested modifications of and reversals to the Permit.

Counsel for Petitioner/Appellant Williams Four Corners LLC



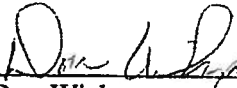
Richard L. Griffith
Richard L. Griffith, LLC
1580 Lincoln St., Suite 1200
Denver, CO 80203
Telephone: (303) 534-4615
Facsimile: (303) 825-3202
E-Mail: RickLGrif@aol.com

Elizabeth A. Joyner
Senior Counsel
Williams
One Williams Center 47th Floor
Tulsa, OK 74172
Telephone: (918)573-1143
Elizabeth.Joyner@Williams.com

Affirmation by Williams Four Corners LLC

On behalf of Williams Four Corners LLC, I attest that the information
in the Appeal Petition is true and correct to the best of my knowledge and belief.

Executed on this 18th day of January, 2012, in Bloomfield, New Mexico.

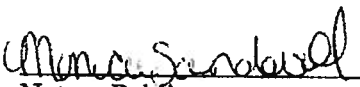


Don Wicburg
General Manager
G&P Onshore-FCA

STATE OF NEW MEXICO
COUNTY OF SAN JUAN, ss

Subscribed and sworn/affirmed before me on the 18th day of January, 2012, by the above-signed
_____.





Notary Public
My commission expires: 8/19/2015

CERTIFICATE OF SERVICE

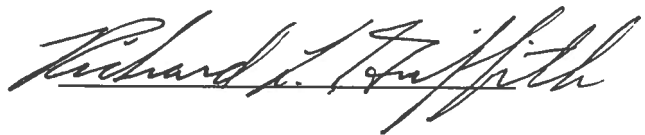
The undersigned certifies that on January 18, 2012, Petitioner's Appeal Petition was served via express mail on the following:

Richard L. Goodyear, PE
Acting Bureau Chief
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, NM 87507-3113

Bryan Flynn
Office of General Counsel
P.O. Box 5469
1190 S. St. Francis Drive, Suite N4056
Santa Fe, New Mexico 87501

F. David Martin
Cabinet Secretary
New Mexico Environment Department
P.O. Box 5469
1190 S. St. Francis Drive, Suite N4050
Santa Fe, New Mexico 87501

Felicia Orth
Hearing Officer
New Mexico Environment Department
P.O. Box 5469
1190 S. St. Francis Drive, Suite N4050
Santa Fe, New Mexico 87501





SUSANA MARTINEZ
GOVERNOR

JOHN A. SANCHEZ
LIEUTENANT GOVERNOR

New Mexico
ENVIRONMENT DEPARTMENT

Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, NM 87507-3113
Phone (505) 476-4300
Fax (505) 476-4375
www.nmenv.state.nm.us




DAVE MARTIN
CABINET SECRETARY

BUTCH TONGATE
DEPUTY SECRETARY

TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No: 7008 0500 0001 1251 7232
Return Receipt Requested

Operating Permit No:	P098-R2
Facility Name:	Lybrook Gas Plant
Permittee Name:	Williams Four Corners, LLC
Mailing Address:	188 County Road 4900 Bloomfield, NM 87413
TEMPO/IDEA ID No:	979-PRT20100002
AIRS No:	35-039-0010
Permitting Action:	Renewal
Source Classification:	Major – PSD
Facility Location:	36°13'52" N and 107°32'46" W
County:	Rio Arriba
Air Quality Bureau Contact:	Coleman Smith
Main AQB Phone No.	(505) 476-4300


Richard L. Goodyear, PE
Acting Bureau Chief
Air Quality Bureau

DEC 21 2011

Date

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

- A. Not Applicable

A101 Permit Duration (expiration)

- A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)
- B. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

A102 Facility: Description

-
- A. The function of the facility is to process pipeline quality natural gas.
- B. This facility is located approximately 4.5 miles west-northwest of Counselor, New Mexico in Rio Arriba County. (20.2.70.302.F NMAC)
- C. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding insignificant or trivial activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	501.2
Carbon Monoxide (CO)	367.1
Volatile Organic Compounds (VOC)*	241.8
Total Particulate Matter (TSP)	34.3
Particulate Matter less than 10 microns (PM ₁₀)	5.3
Particulate Matter less than 2.5 microns (PM _{2.5})	4.7

*VOC total includes emissions from HAPs, Fugitives, and SSM.

Table 102.B: Total Potential HAPs that exceed 1.0 tons per year

Pollutant	Emissions (tons per year)
Acetaldehyde	3.1
Benzene	4.3
Formaldehyde	4.3
n-Hexane	1.9
Total HAPs**	16.8

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations and Non-Applicable Regulations

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit No: 0081-M5 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.1.116 NMAC General Provisions – Significant Figures	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.37 NMAC Petroleum Processing Facilities	X	Entire Facility
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility

Applicable Requirements	Federally Enforceable	Unit No.
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	Entire Facility
20.2.77 NMAC New Source Performance	X	7, 11
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	9, 10, T-15
20.2.300 NMAC Reporting of Greenhouse Gas Emissions	X	Entire Facility
20.2.301 NMAC Greenhouse Gas Reporting – Verification Requirements	X	Entire Facility
40 CFR 50 National Ambient Air Quality Standards	X	
40 CFR 60, Subpart A, General Provisions	X	7, 11
40 CFR 60, Subpart GG	X	7, 11
40 CFR 63, Subpart A, General Provisions	X	9, 10, T-15
40 CFR 63, Subpart ZZZZ	X	9, 10
40 CFR 63, Subpart CCCCCC	X	T-15
40 CFR 64 Compliance Assurance Monitoring	X	16
40 CFR 68 Chemical Accident Prevention	X	Entire Facility

- B. Table 103.B lists requirements that are **not** applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

Table 103.B: Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
20.2.1 NMAC General Provisions (All portions except 20.2.1.116)		X	
20.2.2 NMAC Definitions		X	
20.2.3 NMAC NMAAQS			20.2.3.9 NMAC
20.2.5 NMAC Source Surveillance		X	
20.2.8 NMAC Emissions Leaving New Mexico		X	
20.2.61 NMAC Smoke and Visible Emissions			20.2.61.109 NMAC
20.2.75 NMAC Permit Fees		X	
20.2.80 NMAC Stack Heights	X		
40 CFR 52, Approval and Promulgation of Implementation Plans		X	

- (1) Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.
- (2) No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

- C. Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards

specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 0081-M5.

A104 Facility: Regulated Sources

- A. Table 104 lists all of the emission units authorized for this facility. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

Table 104: Regulated Sources List

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
1	Turbine	Solar Saturn T-1200	S430871	1126 hp/ 12.49 MMBtu/hr	1975
2	Turbine	Solar Saturn T-1200	S430873	1126 hp/ 12.49 MMBtu/hr	1975
3	Turbine	Solar Saturn T-1200	S430872	1126 hp/ 12.49 MMBtu/hr	1975
4	Turbine	Solar Saturn T-1200	S426607	1126 hp/ 12.49 MMBtu/hr	1975
5	Turbine	Solar Saturn T-1200	S428314	1126 hp/ 12.49 MMBtu/hr	1973
6	Turbine	Solar Saturn T-1200	S428313	1126 hp/ 12.49 MMBtu/hr	1973
7	Turbine	Solar Saturn T-1200	SC79085	1126 hp/ 12.49 MMBtu/hr	1979
9	2SLB RICE	Clark HRA-8	A25648	723 hp	Pre-1972
10	2SLB RICE	Clark HRA-8	A25748	723 hp	Pre-1972
11	Turbine	Solar Saturn T-1600	DSM0109	1249 hp/ 14.19 MMBtu/hr	1996
15	Heater	Wheco 4H3-32-8-VZ	724-66	23.4 MMBtu/hr	Pre-1972
16	Flare	unknown	unknown	Pilot: 1.4 MMBtu/hr	Pre-1972
21	Cooling Tower	unknown	unknown	Max. recirc rate: 4500 gal/min	1976
22	Propane Loading Rack	unknown	unknown	unknown	1959
23	Amine Unit	unknown	unknown	Inlet capacity: 70 MMscfd; lean amine recirc. rate: 80 gal/min	1976
T-15	Gasoline Storage Tank and Gasoline Dispensing Facility (GDF)	unknown	unknown	300 gal	1993
F-1	Sitewide Fugitives	Not applicable	Not applicable	Not applicable	Not applicable

A105 Facility: Control Equipment

- A. Table 105.A lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

Table 105.A: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit No.
16	Flare	VOC, HAPs	Sitewide

A106 Facility: Allowable Emissions

- A. The following table(s) list the emission units, and their allowable emission limits. (40 CFR 50, Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit 0081-M5).

Table 106.A: Allowable Emissions

Unit No.	NO _x pph	NO _x tpy	CO pph	CO tpy	VOC pph	VOC tpy	TSP pph	TSP tpy	PM ₁₀ pph	PM ₁₀ tpy
1	4.2	18.3	6.5	28.4	< ²	1.3	<	<	<	<
2	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
3	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
4	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
5	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
6	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
7	4.2	18.3	6.5	28.4	<	1.3	<	<	<	<
9	35.8	156.6	16.0	69.9	19.7	86.4	<	<	<	<
10	35.8	156.6	16.0	69.9	19.7	86.4	<	<	<	<
11	7.5	32.9	1.8	7.9	<	<	<	<	<	<
15	4.4	19.1	1.1	4.8	<	<	<	<	<	<
16	9.3	7.9	18.6	15.8	7.1	6.0	<	<	<	<
21	- ³	-	-	-	-	-	6.8	29.6	0.12	0.51
22	-	-	-	-	6.4	19.3	-	-	-	-
23	-	-	-	-	1.4	6.0	-	-	-	-
T-15	-	-	-	-	* ⁴	1.1	-	-	-	-
F-1	-	-	-	-	*	26.8	-	-	-	-

Unit No.	¹ NO _x pph	NO _x tpy	CO pph	CO tpy	VOC pph	VOC tpy	TSP pph	TSP tpy	PM ₁₀ pph	PM ₁₀ tpy
Total ⁵		501.2		367.1		241.8		34.3		5.3

- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂
- 2 "<" indicates the application represented uncontrolled emissions less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls.
- 3 "-" indicates the application represented emissions as not expected for this pollutant.
- 4 "*" indicates hourly emission limits are not appropriate for this operating situation.
- 5 Total allowables are for information only, not enforceable conditions, and used to determine annual Operating Fees.

- B. NO_x emissions: Unit 11 is subject to the 40 CFR 60, Subpart GG NO_x emissions limitation found at §60.332(a)(1). The unit shall not emit nitrogen oxides in excess of 150 ppmvd (15% O₂, dry basis). (NSR 0081-M5, Specific Condition 2.c., revised).
- C. SO₂ emissions: Units 7 and 11 are subject to the 40 CFR 60, Subpart GG SO₂ emissions limitation found at §60.333(a) *or* (b). Each unit shall not emit in excess of 0.015 volume percent (150 ppmv) SO₂ at 15% O₂ on a dry basis *or* shall not burn any fuel which contains total sulfur in excess of 0.8 wt % (8000 ppmw). (NSR 0081-M5, Specific Condition 2.d., revised)

A107 Facility: Allowable Startup, Shutdown, Maintenance & Malfunction Emissions

- A. The emission limits in Table 106.A for the flare, Unit 16, are represented in the application as allowable SSM blowdown emissions with unknown quantities of steady-state emissions. The permittee shall maintain records in accordance with Conditions A206.C and B109.E.
- B. The application does not represent any level of allowable malfunction emissions as included in the Table 106.A emission limits for the flare, Unit 16. Therefore, there are no allowable malfunction emissions authorized by this permit.

A108 Facility: Hours of Operation

- A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting requirements are required to demonstrate compliance with continuous hours of operation.

A109 Facility: Reporting Schedules

- A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on May 1st and November 1st of each year.

- B. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on November 1st of each year.
- C. Any required quarterly reports shall be maintained on-site and summarized in the semi-annual reports, except when submittal is specifically required in accordance with any State or Federal regulation.

A110 Facility: Fuel Sulfur Requirement

A. Combustion Sources

Requirement: All combustion emission units shall combust only natural gas containing no more than 0.25 grains of total sulfur per 100 dry standard cubic feet. (NSR 0081-M5, Specific Condition 1.e., revised)
Monitoring: None
Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel gas analysis, specifying the allowable limit or less. If a fuel gas analysis is used, the analysis shall not be older than one year. Alternatively, the permittee may elect to monitor the fuel sulfur for all combustion units, including Units 7 and 11 that are subject to NSPS Subpart GG in accordance with the Custom Fuel Monitoring Schedule (CFMS) attached as Appendix A of this permit. (NSR 0081-M5, Specific Conditions 3.a., 3.d., and 4.d., revised)
Reporting: The permittee shall report in accordance with Section B110.

A111 Facility: 20.2.37 NMAC

A. Particulate Matter: Combustion Sources

Requirement: 20.2.37.202.A. NMAC: The permittee shall not permit, cause, suffer, or allow particulate matter emission to the atmosphere in excess of 0.05 grains per dry standard cubic foot.
Monitoring: The use of natural gas fuel meeting the requirements of Condition A110.A constitutes compliance with 20.2.37.202.A. NMAC.
Recordkeeping: Demonstrated through recordkeeping under Condition A110.A.
Reporting: Demonstrated through reporting under Condition A110.A.

B. Hydrogen Sulfide and Mercaptan Emissions: All Non-Combustion Sources

Requirement: 20.2.37.200.A(1) and B(1) NMAC: The permittee shall not permit, cause, suffer, or allow total mercaptan emission to the atmosphere in excess of 0.25 lbs/hr or allow hydrogen sulfide emissions to the atmosphere in excess of 10 ppmv in the undiluted effluent gas stream or streams. (NSR 0081-M5, Specific Condition 2.e., revised)
Monitoring: Compliance is demonstrated by the requirements of Condition A115.A.
Recordkeeping: The permittee shall maintain records in accordance with Section B109.
Reporting: The permittee shall report in accordance with Section B110.

C. 20.2.37.7.C NMAC: New Petroleum Processing Facility

Requirement: The facility is a New Petroleum Processing facility in accordance with the definition found at 20.2.37.7.C NMAC. The permittee shall comply with all applicable requirements therein. (NSR 0081-M5, Specific Condition 1.j., revised)

Monitoring: The permittee shall perform all monitoring specific to applicable requirements in 20.2.37 NMAC.

Recordkeeping: The permittee shall maintain all specific records required by the applicable requirements in 20.2.37 NMAC and shall maintain all records in accordance with Section B109.

Reporting: The permittee shall perform all specific reporting required by the applicable requirements in 20.2.37 NMAC and shall report in accordance with Section B110.

A112 Alternative Operating Scenario (Not Required)A113 Compliance Plan

A. Inlet Gas Sulfur

Requirement: The facility is in compliance with all applicable requirements as of the date of issuance of this permit. If the inlet gas stream contains 1 ppmv or greater total sulfur (as mercaptans + H₂S for laboratory extended gas analyses, or as H₂S measured on the lowest range stain tube (0.2 – 2.0 ppmv), the permittee shall calculate the predicted hourly and annual emission rates for SO₂ (Unit 16) and H₂S (Units 23 and F-1). (20.2.70.302.E(4) NMAC)

Monitoring: Per Condition A115.A.

Recordkeeping: The permittee shall maintain all records in accordance with Section B109.

Reporting: All calculations based on an inlet gas composition analysis of ≥ 1 ppmv total sulfur shall be reported to the Enforcement Section of the Department within 30 days of the analysis. The permittee shall report in accordance with Section B110.

A114 Reducing Facility Emissions (Not Required)A115 Facility: Inlet Capacity and Gas Composition

A. Facility Inlet

Requirement: The following requirements apply to all gas received by the facility:

- 1) The facility shall not process more than 89 MMscfd. (NSR 0081-M5, Specific Condition 1.f.)
- 2) Gas samples to determine composition shall be taken on-site at the facility inlet. Gas analyses taken from any upstream compressor station shall not constitute compliance with this requirement.

Monitoring: The permittee shall perform the following monitoring:

- 1) The facility inlet flow rate shall be continuously monitored using a totalizing flowmeter.
- 2) An inlet gas sample shall be collected annually and tested using an on-site or laboratory high-resolution gas chromatograph. The extended gas analysis shall include

<p>BTEX components, an extended mercaptan analysis, the heating value (Btu/scf), and H₂S. Each component of the gas shall be measured with a detection limit of 1 ppmv or less. The first extended analysis shall be performed within 120 days of the issuance of this permit, in accordance with Condition B108.H.</p> <p>3) The permittee shall perform quarterly H₂S analyses using the lowest range stain tube at the facility inlet, beginning with the first calendar quarter following the initial extended gas analysis. (NSR 0081-M5, Specific Condition 3.f., revised)</p>
<p>Recordkeeping: The permittee shall maintain the following records:</p> <p>1) The totalized inlet flowrate shall be recorded daily. (NSR 0081-M5, Specific Condition 3.g.)</p> <p>2) A calculation of the daily quantity of sulfur introduced at the plant inlet. The calculation shall be performed each quarter and shall be based on the most recent inlet gas H₂S measurement. This record shall be made available within 15 days of the end of each calendar quarter. (NSR 0081-M5, Specific Condition 4.g., revised)</p> <p>3) The results of all annual gas analyses and quarterly H₂S analyses.</p> <p>4) The permittee shall maintain records in accordance with Section B109. (NSR 0081-M5, Specific Condition 4.b. and 4.f., revised)</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

- A. This section has common equipment related to most Oil and Gas Operations.

A201 Engines

- A. Maintenance and Repair Monitoring (Units 9 and 10)

<p>Requirement: The permittee shall comply with the allowable emission limits at Table 106.A.</p>
<p>Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Maintenance and repair activities that involve adjustment, replacement, or repair of functional components with the potential to affect operation of an emission unit shall be documented as they occur for the following events:</p> <p>(a) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.</p> <p>(b) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.</p>
<p>Recordkeeping: The permittee shall maintain records in accordance with Section B109.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

B. Periodic Testing (Units 9 and 10)

Requirement: The permittee shall comply with the allowable emission limits at Table 106.A.

Monitoring: The permittee shall test using a portable analyzer subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NO_x and CO, emissions tests shall be carried out as described below. Test results that demonstrate compliance with the NO_x and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- 1) The monitoring period shall be annually.
- 2) The first test shall occur within the first monitoring period occurring after permit issuance.
- 3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- 4) Follow the General Testing Procedures of Section B111.
- 5) In accordance with Condition B108.D(3), each RICE shall be tested at least once during the 5-year term of this Title V permit, regardless of the hours of operation.

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

C. 40 CFR 63, Subpart ZZZZ (Units 9 and 10)

Requirement: The units are Existing Stationary SI RICE located at an area source of HAP emissions, and will be subject to 40 CFR 63, Subparts A and ZZZZ no later than the applicability date found at 40 CFR 63.6595(a)(1).

Monitoring: The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to §63.6655 and §63.10.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to §63.6645, §63.6650, §63.9, and §63.10.

A202 Glycol Dehydrators (Not Required)**A203 Tanks****A. Tank Throughput (Unit T-15)**

Requirement: To demonstrate compliance with the annual VOC allowable limit at Table 106.A, total gasoline throughput to the unit shall not exceed 5000 gallons per year based on a monthly rolling 12-month total.

Monitoring: The permittee shall monitor the monthly total throughput once per month.

Recordkeeping: The permittee shall record the monthly total throughput of liquids and each month the permittee shall use this value to calculate and record a monthly rolling, 12-month total throughput. Tank breathing and working emissions were calculated using the USEPA Tanks program Version 4.0.9.d. Emission rates computed using the same parameters, but with a different Department approved algorithm that exceed these values will not be deemed non-

compliance with this permit. (NSR 0081-M5, Specific Condition 2.b., revised)

The permittee shall calculate tank VOC emissions based on the tank capacity at Table 104 and based on a throughput of 5000 gal/y within 120 days of permit issuance. Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

B. NESHAP - 40 CFR 63 Subpart CCCCCC (Unit T-15)

Requirement: Unit T-15 is subject to the requirements in 40 CFR 63, Subparts A and CCCCCC, §63.11116 as a Gasoline Dispensing Facility (GDF) with throughput of less than 10,000 gal/month.

- 1) The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the requirements listed in §63.11116(a).
- 2) No notifications are required for Unit T-15, however, the permittee shall have records available within 24 hours of a request by the Administrator to document fuel throughput.

Monitoring: As required by Subparts A and CCCCCC.

Recordkeeping: The permittee shall maintain monthly fuel throughput records in accordance with Condition A203.A, all records required by 40 CFR 63, Subparts A and CCCCCC, and in accordance with Section B109.

Reporting: The permittee shall report as required by 40 CFR 63, Subparts A and CCCCCC, and in accordance with Section B110.

C. Truck Loading – Propane Loading Rack (Unit 22)

Requirement: To demonstrate compliance with the VOC allowable limits at Table 106.A, the propane loadout volume shall not exceed 30 MMgal/y based on a monthly rolling 12-month total. The propane loading rack VRU shall be operational during all loadout events.

Monitoring: The permittee shall monitor the following parameters:

- 1) Volume of propane loaded for each truck; and
- 2) Total propane loadout volume on a monthly basis.

Recordkeeping: The permittee shall record the following:

- 1) Monthly calculated average hourly propane loadout volume (gal/hr) based on the monthly total.
- 2) Monthly total loadout volume, and calculate and record a monthly rolling, 12-month total of loadout volume.
- 3) Monthly calculation of the Unit 22 pph and tpy VOC emission rate.
- 4) Date, time, duration, and cause of all VRU down time.
- 5) Emissions associated with any propane loadout that occurs during VRU down time shall be reported as excess in accordance with 20.2.7 NMAC.
- 6) Records shall also be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

A204 Heaters/Boilers**A. Operational Inspection (Unit 15)**

Requirement: The permittee shall comply with the allowable emission limits at Table 106.A.

Monitoring: The permittee shall conduct annual operational inspections to determine that the heater is operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the heater manufacturer, and indications based on operational experience with the unit.

Recordkeeping: The permittee shall maintain records of operational inspections, describing the results of all operational inspections noting chronologically any adjustments needed to bring the heater into compliance. Records shall be maintained in accordance with section B109.

Reporting: The permittee shall report in accordance with Section B110.

B. Excess Air (Unit 15)

Requirement: The permittee shall comply with the allowable emission limits at Table 106.A.

Monitoring: The permittee shall monitor the excess air level in the flue gas semi-annually using a portable oxygen analyzer, an ORSAT analyzer, or other method approved in advance by the Department. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee must follow the procedures described in Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods, US EPA, Publication no. EPA-600/4-77-02 (or later), Section 3.2.

Excess air measurements that use an electronic analyzer must conform to the procedures in the most current version of the Bureau's Standard Operating Procedure: Use of Portable Analyzers in Performance Tests. The permittee need only observe the steps that: a) require submission of a protocol, b) specify a minimum instrument response time, c) require instrument calibration, and d) specify the method of sampling the flue gas. The permittee shall carry out a minimum of five minutes of uninterrupted sampling for each stack.

Concurrent with the semi-annual excess air measurements, the permittee shall also monitor the fuel flow rate and firing box temperature.

The permittee shall compare the excess air measurement with the manufacturer's specifications and determine if an adjustment in the air/fuel ratio, fuel flow rate, or firing box temperature is required for proper combustion. If an adjustment is determined necessary, it shall be performed with 30 days of completion of the excess air measurement.

Recordkeeping: The permittee shall maintain records of excess combustion air to include the heater's fuel flow rate and firing box temperature. If an electronic O₂ sensor is used, records shall be kept of instrument calibration data, and the make and model of the instrument. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee must record all calibration results. The record shall also include all manufacturer's specifications for the

acceptable excess air range.

Reporting: The permittee shall summarize in chronological order the results of excess air measurements noting any adjustments needed to bring the heater into compliance with permit conditions.

A205 Turbines

A. Periodic Testing (Units 1-7, 11)

Requirement: For all units, the permittee shall comply with the allowable emission limits at Table 106.A. For Unit 11, the permittee shall also comply with the NO_x and SO₂ emission limits at Conditions A106.B and A106.C. For Unit 7, the permittee shall also comply with the SO₂ emission limit at Condition A106.C. The use of fuel gas meeting the sulfur requirement at Condition A110.A shall be considered a demonstration of compliance with Condition A106.C.

Monitoring: The permittee shall test using a portable analyzer subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NO_x and CO, emissions tests shall be carried out as described below. Test results that demonstrate compliance with the NO_x and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- 1) The test period shall be annually.
- 2) The first test shall occur within the first monitoring period occurring after permit issuance.
- 3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- 4) Follow the General Testing Procedures of Section B111.

Recordkeeping: The permittee shall maintain periodic emissions test records in accordance with Section B109. The permittee shall also record the results of the periodic emissions tests, including the turbine's fuel flow rate and horsepower at the time of the test, and the type of fuel fired (natural gas, field gas, etc.).

If a combustion analyzer is used to measure NO_x, CO, and/or excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee shall record all calibration results.

The permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.

Reporting: The permittee shall submit reports in accordance with Section B110.

B. 40 CFR 60, Subpart GG (Units 7 and 11)

Requirement: The units are subject to 40 CFR 60, Subpart GG and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG.

Monitoring: The permittee shall comply with the monitoring and testing requirements of 40 CFR 60.334 and 60.335.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR

60.334 and 40 CFR 60.7.

Reporting: The permittee shall comply with the reporting requirements of 40 CFR 60.7.
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A206 Flares**A. Facility Blowdown System (Unit 16)**

Requirement: The permittee shall not operate a blowdown system without disposing of the gases in a manner which will minimize hydrocarbon emissions to the atmosphere. (20.2.37.205.E NMAC)
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Monitoring: The permittee shall ensure that the blowdown flare is a smokeless flare, defined as a flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. (NSR 0081-M5, Specific Condition 1.i., revised)
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Recordkeeping: The permittee shall maintain a record of the date and duration of any visible emissions.
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Reporting: The permittee shall report in accordance with Section B110.

B. Flare Pilot (Unit 16)

Requirement: The permittee shall maintain in good working order an alarm system connected to the flare which will signal the non-combustion of the gas (20.2.37.205.E NMAC, NSR 0081-M5, Specific Condition 3.c.). The alarm system shall be interfaced with a flare pilot monitoring device.
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Monitoring: The permittee shall continuously monitor for the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame. (NSR 0081-M5, Specific Condition 3.e.)

Recordkeeping: The permittee shall maintain a record of the date and duration of any flare pilot alarms, the cause for the alarm, and the corrective action taken. (NSR 0081-M5, Specific Condition 4.e., revised)

Reporting: The permittee shall report in accordance with Section B110.

C. Flare Emissions (Unit 16)

Requirement: The permittee shall comply with the allowable emission limits at Table 106.A and Condition A106.D as based on a monthly rolling 12-month total.

Monitoring: The flowrate of process gas to the flare shall be continuously monitored using a totalizing flowmeter.

Recordkeeping: The permittee shall maintain the following records:

- | |
|---|
| <ol style="list-style-type: none"> 1) For steady-state emissions, the totalized daily and calculated average hourly flow volume for each day that the flare is in operation. 2) A description of the nature of each event, distinguishing between steady-state and SSM events. For SSM events, a correlation between the actual event type and the event listed in the facility SSM Plan as required by 20.2.7.14.A NMAC. 3) For SSM events, the date, start and end times, and the actual hourly average flow volume during the event. For SSM events of shorter duration than 1 hour, the actual flow volume during the event. 4) The monthly total flow volume (steady-state + SSM event types). |
|---|

- 5) A monthly rolling 12-month average hourly and total annual flow volume.
- 6) For SSM events, the calculated hourly emission rate for each event.
- 7) A monthly calculation of the average hourly emissions (steady-state + SSM events) for all pollutants, based on the known composition and heating value of the flared process gas.
- 8) For both steady-state and SSM event types, the following applies to emissions calculations:
 - (a) if field (inlet) gas is flared, emissions shall be calculated based on the flared gas volume, most recent annual extended gas analysis, heating value, and most recent annual extended mercaptan + H₂S analysis or quarterly H₂S analysis, whichever indicates higher total sulfur;
 - (b) if outlet (residue) gas is flared, emissions shall be calculated on the flared gas volume and most recent pipeline sales records defining the gas composition and heating value;
 - (c) if any other intermediate product is flared (such as, but not limited to propane or NGL), emissions shall be calculated based on the flared gas volume and the estimated gas composition and heating value.
- 9) A calculation of the monthly rolling 12-month total annual emissions (steady-state + SSM) for all pollutants.
- 10) All records shall be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

D. 40 CFR 64, CAM Plan (Unit 16)

Requirement: The flare, Unit 16, is subject to 40 CFR 64, Compliance Assurance Monitoring (CAM) and the permittee shall comply with the applicable requirements at §64.3, §64.7, §64.9(a), §64.9(b), and shall comply with the requirements of the CAM Plan attached to this permit as Appendix B.

Monitoring: The permittee shall monitor in accordance with the CAM Plan pursuant to §64.3, and continue the monitoring operations pursuant to §64.7. Data from at least one indicator shall be collected at a minimum frequency of once every 24 hours, pursuant to §64.3(b)(4)(iii).

Recordkeeping: The permittee shall comply with the recordkeeping requirements of §64.9(b).

Reporting: The permittee shall comply with all reporting requirements of §64.9(a).

A207 Sulfur Recovery Unit (Not Required)

A208 Amine Unit

A. Unit 23

Requirements:

- 1) The permittee shall comply with the allowable emission limits at Table 106.A and Condition A106.E.
- 2) The amine unit contactor shall not receive greater than 70 MMscfd of process gas.

<p>3) The lean amine recirculation rate shall not exceed 80 gal/min.</p> <p>4) The amine unit flash tank shall be routed in a closed-loop system back to the process or used as fuel gas. The closed-loop system shall have no provision for bypass.</p>
<p>Monitoring: The permittee shall perform the following monitoring:</p> <ol style="list-style-type: none"> 1) The amine unit contactor inlet gas flowrate shall be continuously monitored using a totalizing flowmeter. 2) The lean amine recirculation rate shall be monitored on a quarterly basis. 3) An annual inspection of the amine unit flash tank closed-loop system shall be conducted. The inspection shall include an evaluation of the proper system routing, overall integrity of all pipework, valves, flanges, and fittings, and an evaluation of the closed loop system for corrosion. Any maintenance or repair necessary as a result of the annual inspection shall be performed within 90 days of the inspection. 4) The amine unit contactor inlet gas shall be analyzed annually. The analysis shall include BTEX and H₂S. Alternatively, the permittee may substitute the annually-determined facility inlet gas composition.
<p>Recordkeeping: The permittee shall maintain the following records:</p> <ol style="list-style-type: none"> 1) The annual average lean amine recirculation rate (gal/min) as based on the most recent four quarterly flow readings. 2) The totalized daily inlet gas flow volume. 3) The totalized monthly inlet gas flow volume. 4) A monthly rolling 12-month average daily inlet gas flow volume. 5) An annual calculation of the average hourly and total annual regenerator emissions for VOC, HAPs, and H₂S, based on a run of a process simulator, such as, but not limited to AmineCalc®, HYSYS®, or ProMax®. Emissions shall be calculated based on the most recent annual extended gas analysis, most recent quarterly H₂S analysis, and most recent annual average daily flow volume. 6) A record of each annual flash tank closed-loop system inspection and any maintenance or repair performed as a result of the inspection.
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

A209 Fugitives

A. — Leak Detection and Repair Program (Unit F-1)

<p>Requirement: The permittee shall comply with the allowable emission limits at Table 106.A.</p>
<p>Monitoring: For any pipework, fitting, valve, or component that contributes to the sitewide fugitive VOC emission limit, the permittee shall:</p> <ol style="list-style-type: none"> 1) Conduct an annual chemical analysis of the pipe contents; and an annual inspection of components in VOC service (VOC weight >10%) through a leak detection plan using a monitoring instrument that conforms to the requirements of 40 CFR 60, Appendix A, Method 21. 2) An inspection of components in VOC service shall also be performed within 15 days of any maintenance or repair that affects components. 3) The permittee shall place a visible tag on all components that have a liquid leak or a vapor leak greater than 10,000 ppm until those components are repaired.

Recordkeeping: The permittee shall maintain the following records:

- 1) Component identification or description and location;
- 2) Date a leak is detected;
- 3) Dates of attempts to repair;
- 4) Designation of "Repair delayed" and reason for delay if the leak is not repaired within 30 days of leak discovery; and
- 5) Date of successful leak repair.

Reporting: The permittee shall report the following in accordance with Section B110: 1) The number of leaking components discovered, 2) The number of leaking components not repaired within 30 days, and 3) The duration of the leaks that exceeded 30 days.

A210 Cooling Tower

A. Unit 21

Requirement: The permittee shall comply with the emission limits at Table 106.A as based on a monthly rolling 12 month average Total Dissolved Solids (TDS) of the water. The permittee shall:

- 1) Limit the total recirculation water pump capacity (all pumps combined) to no more than 4500 gallons per minute.
- 2) Limit the Total Dissolved Solids (TDS) content for the recirculating water system to 15,000 ppmw (annual average).
- 3) Ensure that drift eliminators are present and in good working order.

The permittee shall measure the Total Dissolved Solids (TDS) content of the recirculating water through direct laboratory analysis for each system, or install a conductivity meter on the recirculating water system for each cooling tower, and determine correlations between conductivity of the water and the Total Dissolved Solids (TDS) content.

Monitoring: The permittee shall:

- 1) Monitor the recirculating water TDS content of each system by direct laboratory analysis of the TDS or through use of conductivity meter values and correlated TDS on a monthly basis; and
 - a. If a conductivity meter is used, a correlation shall be developed by the permittee that includes laboratory measurement of at least 10 water samples with approximately evenly spaced measured TDS values that bracket the minimum and maximum values expected. The highest laboratory TDS sample used for the correlation shall be greater than the maximum allowable TDS. The correlation shall be completed within 180 days of permit issuance. Alternatively, the permittee may assume a correlation of 1 (TDS (ppmw) = conductivity ($\mu\text{mho/cm}$)).
- 2) Perform an annual inspection of the drift eliminators and perform any maintenance necessary to ensure the device operates according to the manufacturer's specifications.

Recordkeeping: The permittee shall maintain the following records:

- 1) Manufacturer's specifications or engineering calculations that confirm the total combined recirculation water pump capacities (gal/min).
- 2) A monthly rolling 12-month average TDS (ppmw).

- 3) If a conductivity meter is installed, a record of the correlation between conductivity and TDS, all laboratory analyses used to determine the correlation, all related calculations, or a statement that the above allowed assumption that the correlation is equal to 1 was employed.
- 4) A record of the annual drift eliminator inspection and any records of maintenance performed.

Reporting: The permittee shall report in accordance with Section B110.

PART B GENERAL CONDITIONS

B100 Introduction

- A. Not Applicable

B101 Legal

- A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)
 - (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act. (20.2.70.302.A.2.a NMAC)
 - (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
 - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.

- (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)
- (4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)
- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)
- (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
- (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
- (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
- (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
- (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
- (11) A responsible official (as defined in 20.2.70.7.AD NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
- (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
- (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit,

the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)

B. Permit Shield (20.2.70.302.J NMAC)

- (1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table 103.A. The requirements in Table 103.A are applicable to this facility with specific requirements identified for individual emission units.
- (2) The Department has determined that the requirements in Table 103.B as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
- (3) This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under Section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.
- (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)

- C.** At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

- A.** This permit is issued pursuant to the federal Clean Air Act ("federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.
- B.** This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C.** The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D.** Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed

to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the federal Act. (20.2.70.302.A.5 NMAC.

- E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

- A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

B104 Appeal Procedures
(20.2.70.403.A NMAC)

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm N2153
P.O. Box 5469
Santa Fe, New Mexico 87502

B105 Submittal of Reports and Certifications

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us.
- B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)

- C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, NM 87507-3113

- D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section
US EPA Region-6, 6EN-AA
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)
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B107 Startup, Shutdown, and Maintenance Operations

- A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements
(20.2.70. 302.A and C NMAC)

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.
 - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
 - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
 - (3) A minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.
- E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.

- F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- H. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

B109 General Recordkeeping Requirements
(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):
 - (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
 - (2) date(s) and time(s) of sampling or measurements;
 - (3) date(s) analyses were performed;
 - (4) the qualified entity that performed the analyses;
 - (5) analytical or test methods used;
 - (6) results of analyses or tests; and
 - (7) operating conditions existing at the time of sampling or measurement.
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record

shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)

- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
 - (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
 - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.
 - (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized limit

B110 General Reporting Requirements
(20.2.70.302.E NMAC)

- A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be contained in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.
- G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.
- H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)
- I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases

and decreases in emissions will comply with the terms and conditions of the permit.

- (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

B111 General Testing Requirements

A. Compliance Tests

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- (3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be at least 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.
- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of 40 CFR 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by 40 CFR 60, Appendix A:
 - (a) Methods 1 through 4 for stack gas flowrate
 - (b) Method 5 for TSP
 - (c) Method 6C and 19 for SO₂
 - (d) Method 7E for NO_x (test results shall be expressed as nitrogen dioxide (NO₂) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO₂ is equivalent to 1.194×10^{-7} lb/SCF)
 - (e) Method 9 for opacity
 - (f) Method 10 for CO
 - (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
 - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
 - (i) Method 29 for Metals
 - (j) Method 201A for filterable PM₁₀ and PM_{2.5}
 - (k) Method 202 for condensable PM
 - (l) Method 320 for organic Hazardous Air Pollutants (HAPs)
 - (m) Method 25A for VOC reduction efficiency
- (2) Alternative test method(s) may be used if the Department approves the change.

C. Periodic Monitoring and Portable Analyzer Requirements

- (1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
- (2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be as follows:
 - (a) For quarterly monitoring, at least 20 minutes
 - (b) For annual monitoring, at least 60 minutes

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

- (3) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to prior approval of the Department.
- (4) During emissions tests, pollutant, O₂ concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.
- (6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed
- (7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at email:reportsgroup.aqb@state.nm.us. For additional reporting guidance see http://www.nmenv.state.nm.us/aqb/enforce_compliance/TitleVReporting.htm
(20.2.70.302.E.3 NMAC)
- E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):
- (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;

- (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;
- (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
- (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.

B113 Permit Reopening and Revocation

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)
 - (1) Additional requirements under the federal Act become applicable to this source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
 - (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
 - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
 - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

B114 Emergencies
(20.2.70.304 NMAC)

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the

permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) This facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B115 Stratospheric Ozone
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
-
- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices. (subsection 82.156)
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (subsection 82.158)
 - (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (subsection 82.161)

B116 Acid Rain Sources
(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.
- B. Where an applicable requirement of the federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.
- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the federal Act.
- G. The acid rain permit is an enclosure of this operating permit.

B117 Risk Management Plan
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. ~~The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.~~
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
- (1) Excess Emission Form (for reporting deviations and emergencies)
 - (2) Compliance Certification Report Form
 - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions
 - (4) SOP for Use of Portable Analyzers in Performance Tests

C101 Definitions

- A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).
- B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.
- C. **"Fugitive emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- D. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate.
- E. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)
- F. **"Natural Gas Liquids"** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- G. **"National Ambient air Quality Standards"** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.

- H. **"NO₂" or "Nitrogen dioxide"** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO_x or NO_x. (20.2.2 NMAC)
- I. **"NO_x"** see NO₂
- J. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.
- K. **"Restricted Area"** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- L. **"Shutdown"** , for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- M. **"SSM"** , for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
- (1) **"Shutdown"** , for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
- (2) **"Startup"** , for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.
- N. **"Startup"** , for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB2-stroke lean burn

4SLB	4-stroke lean burn
4SRB	4-stroke rich burn
acfm	actual cubic feet per minute
AFR	air fuel ratio
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
AQCR	Air Quality Control Region
ASTM	American Society for Testing & Materials
BTU	British Thermal Unit
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	continuous emissions monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulation
CI	compression ignition
CO	carbon monoxide
COMS	continuous opacity monitoring system
EIB	Environmental Improvement Board
EPA	United States Environmental Protection Agency
gr./100 cf	grains per one hundred cubic feet
gr./dscf	grains per dry standard cubic foot
GRI	Gas Research Institute
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant
hp	horsepower
IC	Internal Combustion
KW/hr	kilowatts per hour
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Unit
MACT	Maximum Achievable Control Technology
MMcf/hr	million cubic feet per hour
MMscf	million standard cubic feet
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NG	natural gas
NGL	natural gas liquids
NMAAQs	New Mexico Ambient Air Quality Standards
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NO _x	nitrogen oxides
NSCR	non-selective Catalytic Reduction
NSPS	New Source Performance Standard
NSR	New Source Review

PEM	parametric emissions monitoring
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM ₁₀	particulate matter 10 microns and less in diameter
PM _{2.5}	particulate matter 2.5 microns and less in diameter
pph	pounds per hour
ppmv	parts per million by volume
PSD	Prevention of Significant Deterioration
RATA	relative accuracy test assessment
RICE	reciprocating internal combustion engine
rpm	revolutions per minute
scfm	standard cubic feet per minute
SI	spark ignition
SO ₂	sulfur dioxide
SSM	Startup Shutdown Maintenance (see SSM definition)
TAP	Toxic Air Pollutant
TBD	to be determined
THC	total hydrocarbons
TSP	Total Suspended Particulates
tpy	tons per year
ULSD	ultra-low sulfur diesel
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator Coordinate System
UTMH	Universal Transverse Mercator Horizontal
UTMV	Universal Transverse Mercator Vertical
VHAP	volatile hazardous air pollutant
VOC	volatile organic compounds

C103 Appendix A: Custom Fuel Monitoring Schedule (CFMS)

A. CFMS dated 6/16/00

The New Mexico Environment Department
Custom Fuel Monitoring Schedule
For Stationary Gas Turbines
Subject to 40 CFR Part 60 Subpart GG

This schedule is approved for use only when a stationary gas turbine(s): (1) fires pipeline quality natural gas; (2) does not fire emergency fuel; and (3) does not derive its fuel from an intermediate bulk storage tank. The fuel supplier or suppliers shall be identified for the record prior to the permit issuance or during turbine startup, and at any time that the fuel supplier or suppliers change. If the conditions of this paragraph are not met, the custom schedule cannot be used, and the permittee shall revert to the fuel monitoring requirements of Subpart GG. The custom fuel monitoring schedule is as follows:

- (1) Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The approved reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2). The Gas Producers Association (GPA) test method entitled "Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes" (GPA Standard 2377-86) is an approved alternative method.
- (2) The fuel supply shall be initially sampled daily for a period of two weeks to establish that the pipeline quality natural gas fuel supply is low in sulfur content.
- (3) After the monitoring required in item 2 above, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
- (4) If after the monitoring required in item 3 above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
- (5) Should any sulfur analysis as required in items 3 or 4 above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the NMED of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- (6) If there is a change in fuel supply (supplier) the fuel shall be sampled daily for a period of two weeks to re-establish for the record that the fuel supply is low in sulfur content. If the fuel supply's low sulfur content is re-established, then the custom fuel monitoring schedule can be resumed with the twice monthly sampling.
- (7) Stationary gas turbines that use the same supply of pipeline quality natural gas to fuel multiple gas turbines may monitor the fuel sulfur content at a single common location.
- (8) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

C104 Appendix B: CAM Plan (Unit 16)

- A. The following CAM Plan for the flare, Unit 16, was submitted to the Department as part of the application for this permit renewal in accordance with 40 CFR 64, and has been approved.

**Compliance Assurance Monitoring (CAM) Plan
Lybrook Natural Gas Processing Plant
Plant Flare (Unit 16)**

I. Introduction

The plant flare (Unit 16) controls volatile organic compounds (VOC) blowdown emissions from the Lybrook Natural Gas Processing Plant. The blowdowns are intermittent in nature and come from a variety of sources. The duration of a blowdown is typically 1 minute, though they can last for several hours.

II. Emissions

Pollutant	Uncontrolled		Controlled	
	pph	tpy	pph	tpy
VOC	354.4	301.9	7.1	6.0

The hourly emission limit is calculated from a gas stream flow rate of 44.88 Mscf/hr. The annual emission limit is calculated from a maximum gas stream flow rate of 76.46 MMscf/yr based on a 12-month rolling total. Note that a safety factor of 1.5 is applied to the calculated emission rates.

III. Monitoring

Indicator	Presence of pilot flame	Gas stream flow rate
Measurement Approach	The flare will be equipped with a thermocouple to monitor the presence of the pilot flame.	The flare will be equipped with a meter to monitor the gas stream flow rate.
Indicator Range	Flame present (sensed) or not	Annual flow rate less than or equal to 76.46 MMscf/yr
Performance Criteria		
Monitoring Frequency	Continuous	Continuous
Averaging Period	Not applicable	12-month rolling total
Data Collection Procedures	The flare will be equipped with a continuous recorder. An alarm will sound in the	For each blow down event, operators will log the time of occurrence, type of event

	control room to indicate the absence of the pilot flame. Operators will log the time of the alarm and the time when the flare is brought back into operation.	(startup, shutdown, maintenance, etc.) and duration. At the end of each month, operators will log the monthly gas stream flow rate and calculate the 12-month rolling total flow rate.
Data Representativeness	The presence of the pilot flame is necessary for the destruction of VOC in the gas stream. Ensuring the presence of the pilot flame will help ensure compliance with the emission limit.	The permitted annual emission limit is calculated using a maximum annual flow rate of 76.46 MMscf/yr. Ensuring the flow rate stays at or below this level will help ensure compliance with the emission limit.
QA/QC Practices and Criteria	The alarm system will be tested annually (by turning off the thermocouple). Operators will record all maintenance and repair activities on the monitoring system (including date, time, and nature of the maintenance or repair).	The flow meter will be calibrated annually. Operators will record all maintenance and repair activities on the flow meter (including date, time, and nature of the maintenance or repair).

Operators will record all maintenance and repair activities on the flare (including date, time, and nature of the maintenance or repair).

IV. Response to Excursion

In the event the pilot light is extinguished, maintenance personnel will inspect the flare device within 24 hours and make needed repairs or adjustments as soon as practicable.

In the event the flare needs other maintenance or repair, personnel will perform the maintenance or repair as soon as practicable.

V. Monitoring Approach Justification

Rationale for Selection of Performance Indicators

As combustion is necessary for the destruction of VOC within the flare, the first indicator is to monitor for the presence of the pilot flame. The presence of the

flame will ensure ignition of the gas stream in the flare.

As emissions are directly proportional to the amount of gas burnt by the flare, the second indicator is to monitor the gas stream flow rate. Restricting annual throughput will limit emissions to the permitted value.

Note: As emissions from the flare are intermittent and typically of short duration, it is not feasible to monitor visible emissions using Method 22.

Rationale for Selection of Indicator Ranges

The pilot flame is present or it is not. A well designed and maintained thermocouple-based alarm system will accurately identify the presence of the pilot flame.

The permitted annual emission limit is based on a maximum annual flow rate of 76.46 MMscf/yr. Maintaining an annual flow rate less than or equal to this amount will help ensure compliance with the permit limit.
